

cucullate, rounded at the apex, punctate; only male flowers seen, the perianth urceolate, about 6 mm. long, densely pilose near the base within, otherwise glabrous, punctate, the lobes 4, imbricate, ovate, about 1.5 mm. long and as broad; stamens 8, the filaments strap-shaped, flat, inserted at about the middle of the perianth-tube, alternately longer and shorter, those opposite the perianth-lobes twice as long, about 1.5 mm. long and 0.5 mm. broad, the anthers oblong, about 1 mm. long, reaching the throat of the perianth; rudimentary ovary as in P. apodanthus.

Type: E. P. Killip & A. C. Smith 29936, collected in dense forest, alt. about 100 m., at Mishuyacu, near Iquitos, dept. Loreto, Peru, September 24--28, 1929; deposited in the Britton Herbarium at the New York Botanical Garden.

P. Killipii is easily distinguished from the only other known species in the genus, P. apodanthus Kuhlmann. The principal lateral nerves of the leaves are about half as many and ascending-arcuate, not spreading and straight. The indumentum within the perianth-tube is denser than that of P. apodanthus. The filaments are strap-shaped, and those alternate with the perianth-lobes are manifest, although about half the length of the longer ones; they are inserted at about the middle of the perianth-tube. The filaments opposite the perianth-lobes in P. apodanthus are broadly deltoid, and the alternate ones hardly apparent; they are inserted at the throat of the perianth-tube.

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#### ADDITIONAL NOTES ON THE GENUS AEGIPHILA. IX

Harold N. Moldenke

##### AEGIPHILA BRACHIATA Vell.

The species has been collected in low woods among fields at an altitude of 50 meters in a region where the average annual rainfall is 1.5 m. and the average temperature varies from 5° to 35° C. during the year. It has been collected in anthesis in February and October, and has been confused with Citharexylum by some herbarium workers.

Additional citations: BRAZIL: Rio Grande do Sul: Friedrichs 32928 (N); Henz 32936 (S); Rambo 990 (N). State undetermined: Sellow 1269 [Macbride photos 17590] (N--photo).

##### AEGIPHILA CANDELABRUM Briq.

Additional citations: PARAGUAY: Hassler 8120 [Macbride photos 24621] (N--photo of type).

## AEGIPHILA CHRYSANTHA Hayek

Additional citations: ECUADOR: Guayas: Eggers 14348 [Macbride photo 20349] (N--photo). PERU: Loreto: Poeppig 2314 [Macbride photo 34313] (N--photo of logotype).

## AEGIPHILA CONTURBATA Moldenke

Additional citations: BRAZIL: Maranhão: Newman s.n. [Macbride photo 28377] (N--photo of type).

## AEGIPHILA CORDATA Poepp.

Additional citations: PERU: Loreto: Poeppig 2158 [Macbride photo 34312] (N--photo of type).

## AEGIPHILA CORDIFOLIA (Rufz &amp; Fav.) Moldenke

Additional citations: PERU: Huánuco: Rufz & Favon s.n. [Miña, Panatahua; Macbride photo 28378] (N--photo of isotype).

## AEGIPHILA COSTARICENSIS Moldenke

Additional citations: MEXICO: Chiapas: Matuda 572 (Mh), 2101 (Mh).

## AEGIPHILA CRENATA Moldenke

Additional citations: BRAZIL: Paraná: Dusén 10541 [Macbride photo 30182] (N--photo of isotype).

## AEGIPHILA DEPPEANA Steud.

Additional citations: MEXICO: Chiapas: Seler & Seler 2005 (Gg--245897). JUANA RAMIREZ ISLAND: E. Palmer 464 (Gg--34499). COLOMBIA: Magdalena: Balbis s.n. [Macbride photo 33932] (N--photo).

## AEGIPHILA ELATA Sw.

Additional citations: MEXICO: Tabasco: Matuda 3031 (Mh), 3081 (Mh), 3406 (Mh). BRITISH HONDURAS: Gentle 2633 (Mh), 2843 (Mh), 3350 (Mh); Schipp 216 (Gg--172812). JAMAICA: W. Harris 11746 (Gg--31928); Swartz s.n. (S--isotype).

## AEGIPHILA FALCATA Donn. Sm.

Two vernacular names not before recorded for this species are reported by Matuda from Chiapas. They are "taco" and "táquito".

Additional citations: MEXICO: Chiapas: Matuda 666 (Mh). GUATEMALA: Tiquesata: E. Wall s.n. [21/4/28] (Ew), s.n. [24/4/28] (Ew).

## AEGIPHILA FERRUGINEA Hayek &amp; Spruce

Additional citations: ECUADOR: Imbabura: Lehmann 4700 [Macbride photo 17584] (N--photo). Fichincha: Spruce 5473 [Macbride photo 34311] (N--photo of type).



Fig. 1. Aegiphila bracteolosa Moldenke

## AEGIPHILA FILIPES Mart. &amp; Schau.

Haught describes this plant as a slender shrub with cream-colored flowers.

Additional citations: COLOMBIA: Cundinamarca: Haught 6124 (N). BRAZIL: Pará: Martius s.n. [Macbride photo 20350] (N--photo of cotype).

## AEGIPHILA FLORIBUNDA Moritz &amp; Moldenke

Additional citations: VENEZUELA: Aragua: Moritz 1765 [Macbride photo 34310] (N--photo).

## AEGIPHILA FOETIDA Sw.

Additional citations: JAMAICA: Swartz s.n. (S--isotype).

## AEGIPHILA GLANDULIFERA Moldenke

Romero C. describes the plant as a shrub 6 meters tall.

Additional citations: COLOMBIA: Chocó: Romero C. 503 (N).

## AEGIPHILA GRANDIS Moldenke

Additional citations: COLOMBIA: Cundinamarca: Triana 2080 [Macbride photo 28379] (N--photo).

## AEGIPHILA GUIANENSIS Moldenke

Additional citations: COLOMBIA: Cundinamarca: Triana 2084 [Macbride photo 28380] (N--photo).

## AEGIPHILA HASSLERI Briq.

Additional citations: BRAZIL: Rio Grande do Sul: Buck 31389 (N). PARAGUAY: Haseler 3193 [Macbride photo 24613] (N--photo of cotype). URUGUAY: Fuques s.n. [Lombardo 4153] (N).

## AEGIPHILA HERZOGII Moldenke

Additional citations: BOLIVIA: Santa Cruz: Herzog 1369 [Macbride photo 28381] (N--photo of isotype).

## AEGIPHILA INTEGRIFOLIA (Jacq.) Jacks.

Sandeman describes the flowers of this species as cream-colored.

Additional citations: PERU: Cuzco: Sandeman 3676 (K). BOLIVIA: Santa Cruz: Peredo s.n. [21-III-1946] (N).

## AEGIPHILA INTERMEDIA Moldenke

Additional citations: BRAZIL: Maranhão: Herb. Gen. Mus. Para. 2270 [Macbride photo 28382] (N--photo of isotype).

## AEGIPHILA LANATA Moldenke

Additional citations: BRAZIL: Goyaz: Glaziou 21917 [Macbride photo 28383] (N--photo of isotype).



Fig. 2. Aegiphila gloriosa Moldenke

## AEGIPHILA LAXIFLORA Benth.

Additional citations: BRITISH GUIANA: M. R. Schomburgk 772 [Macbride photo 28384] (N--photo of isotype).

## AEGIPHILA LEHMANNII Moldenke

Additional citations: COLOMBIA: Chocó: Triana 2083, in part [Macbride photo 28385] (N--photo).

## AEGIPHILA LHOTZKIANA Cham.

Additional citations: BRAZIL: Bahia: Casaretto 2022 [Macbride photo 24614] (F--686352, F--772034--photo, Kr--photo, N--photo). Minas Geraes: Heringer s.n. [Herb. Esc. Sup. Agr. Lavras 274; Herb. Dept. Bot. Est. S. Paulo 42456] (N); Markgraf 3281 [Brade & Mello Barreto 12140; Herb. Jard. Bot. Belo Horizonte 28444] (F--1009600); Mello Barreto 3270 [Herb. Jard. Bot. Belo Horizonte 11249; Herb. Rio de Jan. 32273] (F--933076, Ja), 9347 [Herb. Jard. Bot. Belo Horizonte 25608] (F--948145), 9736 [Herb. Jard. Bot. Belo Horizonte 25641] (F--948135), 9796 [Herb. Jard. Bot. Belo Horizonte 25515] (F--948143); Sampaio 344 [Herb. Rio de Jan. 32270] (Ja). Paraná: Jönsson 1028a (F--668473). São Paulo: Zagatto s.n. [Herb. Inst. Agron. Est. S. Paulo 2469; Herb. Dept. Bot. Est. S. Paulo 40171] (Sp). State undetermined: Herb. Rio de Jan. 32272 (Ja); Sellow s.n. [Brasilia; Macbride photo 17585] (F--663064--photo, Kr--photo, N--photo, Vt).

## AEGIPHILA LONGIFOLIA Turcz.

Cuatrecasas describes this plant as a scandent shrub, blooming in November, inhabiting savannas at an altitude of 240 meters.

Additional citations: COLOMBIA: Méta: Cuatrecasas 7730 (Jc). Santander Sur: Schlim 688 [Macbride photo 24616] (F--772036--photo of isotype, Kr--photo of isotype, N--photo of isotype).

## AEGIPHILA LUSCHNATHI Schau.

Synonymy: Aegiphila Luschnatii Schau. apud Hook. f. & Jacks., Ind. Kew. 1: 46, sphalm. 1895; Aegiphila Luschnathii Schau. apud Briq., Bull. Herb. Boiss., ser. 2, 4: 1167, sphalm. 1904.

This species has occasionally been confused in the herbarium with A. laxiflora Benth.

Additional citations: BRAZIL: Rio de Janeiro: Guillemin s.n. [St. Thérèse 1839] (Du--166414); Luschnath s.n. [Herb. Martius 1040; Macbride photo 7879] (F--645715--photo of cotype, Kr--photo of cotype, N--photo of cotype).

## AEGIPHILA MACRANTHA Ducke

Additional items for the description: fruiting-calyx accrescent, woody, light-brown, 2.5--3.5 cm. in diameter, 1.2--2 cm. long, with a rough warty surface, otherwise glabrous, borne on



Fig. 3. *Aegiphila obducta* Vell.

a short pedicel; fruit broadly ovoid-ellipsoid, about 3--4 cm. long and 2.4--3.4 cm. wide. "green, speckled with brown" (when immature?), brown when dried, minutely asperous-granular, sometimes only 1 or 2 maturing in an inflorescence. It is a woody climber found in mixed forests.

Additional citations: BRITISH GUIANA: De la Cruz 2836 (Cm); Herb. Forest. Dept. Br. Guian. 3011 (S), 5295 [F.2550] (N); Sandwith 1202 (S). BRAZIL: Para: Ducke 843 (N).

#### AEGIPHILA MAGNIFICA Moldenke

This plant is said by Standley to be "rare" or "scarce". He found it at an altitude of 700 m. in Guatemala, fruiting in March in wet thickets. The calyx and fruit are very similar to those of A. paniculata. Baker describes it as a woody vine climbing over trees in shaded places.

Additional citations: GUATEMALA: Escuintla: P. C. Standley 89280 (N). Suchitepéquez: P. C. Standley 62196 (F--982650). NICARAGUA: Chinandega: C. F. Baker 204 (Du--76164--isotype, Gg--31927--isotype).

#### AEGIPHILA MARTINICENSIS Jacq.

References: Seymour, Host Ind. Fungi N. Am. 588--589. 1929; Fittier, Suppl. Plant. Usual. Venez. 54. 1939; Roig y Mesa, Plant. Medic. Cuba 410--411 & 770. 1945.

An additional synonym is Aegiphyla martinicensis Jacq. ex Moldenke, Suppl. List Invalid Names 1, in syn. (1941). Roig y Mesa, on page 410 of the reference cited above, records the common name "bois cobré" from Martinique and Guadeloupe. He quotes Gómez de la Maza to the effect that it is a diuretic medicinal tea; a syrup made from it is used in the treatment of asthma. Shafer reports the corollas a white or yellow. The species has been collected in anthesis in January, February, and October, and in fruit in February and March. Holdridge found it in brush pastures at an altitude of 300 feet in Puerto Rico. The Dudley Herb. 166413, labeled as this species, is actually Psychotria sulzneri Small. Cooper describes our plant as a tall shrub or small tree, 10--15 feet tall, with creamy-white flowers, and found it at altitudes of 1800 to 2000 feet on Dominica. He records the common name "sylvania" from there.

Additional citations: PUERTO RICO: Holdridge 423 (N); Otero 308 (Bt--39906), 696 (Bt--52435). MONTSERRAT: Shafer 162 (Cm), 197 (Cm), 539 (Cm), 652 (Cm), 668 (Cm). DOMINICA: G. P. Cooper 60 (F--766225), 167 (Ca--549811, F--771385); Eggers 501 [Herb. Prager 18669] (Gg, Gg--31926). MARTINIQUE: Bailey & Bailey 206 (Ba); Ponthieu s.n. (S). WEST INDIES (island undesignated): Swartz 9 (S). COLOMBIA: Norte de Santander: Cuatrecasas 12845 (W--1851043). LOCALITY UNDESIGNATED: Collector undesig. 158 (Q).

#### AEGIPHILA MEDITERRANEA Vell.





Fig. 4. *Aegiphila racemosa* Vell.

References: Moldenke, *Phytologia* 1: 238 (1937) & 393. 1940; Sampaio & Peckolt, *Arquiv. Mus. Nac. Rio de Jan.* 37: 334. 1943.

In the first of the references cited above I ventured the opinion that the Rodriguez specimen there recorded was collected in the state of Rio de Janeiro, Brazil. It now appears that the specimen actually was collected in Misiones, Argentina. The plant was confused by the collector with Cordia Sellowiana Cham.

The herbarium labels which accompany Macbride's photograph no. 34358 are inscribed "Brazil Moldenke", implying that I collected the plant there depicted. Actually it was collected by George Gardner in 1836.

Additional citations: BRAZIL: Rio de Janeiro: G. Gardner 100 [Macbride photo 34358] (F--977197--photo, Kr--photo, N--photo). ARGENTINA: Misiones: D. Rodriguez 457 [Herb. Inst. Miguel Lillo 57251] (N), s.n. [Lillo 10448] (G).

#### AEGIPHILA MEDULLOSA Moldenke

Additional citations: BRAZIL: Rio de Janeiro: Saint-Hilaire C.50 (F--977114--fragment of type).

#### AEGIPHILA MEMBRANACEA Turcz.

Williams describes the plant as a shrub 2 m. tall, with orange fruit. His collection is a splendid fruiting specimen. Triana's collection was made at an altitude of 450 m. and was in anthesis in January. Steyermark's notes indicate a shrub 10 feet tall, with greenish-white corollas and filaments, grass-green calyx and rachis, and membranaceous leaves which are deep-green above and dull-green beneath. He found the plant in rich damp forests, at an altitude of 1925--2075 m., blooming in May. The label on the Chicago Natural History Museum's specimen of Hostmann 89 is inscribed "French Guiana?" The collection was made in Surinam.

Additional citations: COLOMBIA: Méta: Triana 3713, in part [5] (Jc). VENEZUELA: Bolívar: Ll. Williams 11220 (Ve). Mérida: Steyermark 56379 (F--1205613, N). SURINAM: Hostmann 89 [Macbride photo 24617] (F--633329--photo of isotype, F--686351--fragment of isotype, F--772031--photo of isotype, Kr--photo of isotype, N--photo of isotype).

#### AEGIPHILA MOLLIS H.B.K.

An additional synonym is Aegiphila pubescens (H.B.K.) Willd. ex Moldenke, *Suppl. List Invalid Names* 1, in syn. (1941). All the Bolivian material cited by me as this species in *Brittonia* 1: 406 (1934) and *Phytologia* 1: 239--240 (1937) & 394 (1940) is probably A. Steinbachii Moldenke. The Steinbach 3168 cited in these references is the type collection of A. Steinbachii. The Woodson, Allen, & Seibert 1174 from Panama and Dugand G. 639 from Colombia are anomalous in their extremely short pubescence



Fig. 5. Aegiphila Valerii Standl.

and may actually represent A. puberulenta Moldenke. H. H. Smith 870 in the University of California herbarium may be regarded as typical of the long-pubescent A. mollis. The Elias 581 and Haught 2288, cited as A. mollis in Brittonia 1: 405 (1934) and Phytologia 1: 239 (1937) & 394 (1940) prove actually upon re-examination to be A. puberulenta. The Goudot 2 cited in Phytologia 1: 239 as from an undetermined department of Colombia is actually from either Bolívar or Magdalena. It was collected at "El Volador", and there is a "Volador" in each of these departments.

The original description of A. salutaris H.B.K. states that the type was collected on the shores of the Orinoco close to Santo Thomas del Angostura. The Humboldt 983 cited by me in Phytologia 1: 283 (1938) and in the present contribution is also labelled "Herb. Willdenow 2834" -- which is the herbarium number given for the type collection -- but was collected at San Carlos on the Río Negro, Amazonas, Venezuela.

Dugand G. collected the species at an altitude of only 60--150 m. and describes it as a "shrubby small tree 4--5 m. tall" with the stem 15 cm. in diameter at the base. Quatrecasas describes it as a very leafy shrub with green branches and greenish-yellow or ochraceous corollas or a small tree to 6 m. tall, growing at altitudes of 1400 to 1750 m., fruiting in March. He has found it along roadsides and in cultivated places. Haught describes it as a scrambler to 4 m. tall. Steyermark notes the corolla as pale-yellow, the rachis pale-green, and the leaves membranaceous, deep-green and reticulated above, gray-green beneath, growing at altitudes of 1065 to 2430 m.

Additional citations: PANAMA: Chiriquí: Woodson, Allen, & Seibert 1174 (F--969465, N). COLOMBIA: Atlántico: Dugand G. 639 (F--744565). Cauca: Lehmann 6692 [Macbride photo 17568] (Kr--photo, N--photo). El Valle: Quatrecasas 13869 (N), 14462 (N, W-1852246). Cundinamarca: Bonpland s.n. (F--976412); Quatrecasas 8287 (W--1774636); Triana 3713 [2; 300; 678] (Jc). Magdalena: Haught 3686 (W--1708528); H. H. Smith 868 (Cm, Vt), 870 (Ca--584908, Cm, Vt), 1860 (Cm, Vt). Meta: Jaramillo, Mesa, Idrobo, & Fernández 332 (W--1900437). Tolima: Quatrecasas 10516 (W--1796541). Department undetermined: Apolinar-María 122 (F--1007353). VENEZUELA: Amazonas: Humboldt 983 [Herb. Willdenow 2834; Macbride photo 17588] (F--663067--photo, Kr--photo, N--photo). Federal District: Fittler 7855 (Du--297798, Gg--311279). Guárico: Chardon 117 (W--1801748). Mérida: Steyermark 56314 (N). Miranda: T. González s.n. [Petare arriba] (Ve). State undetermined: Humboldt XII [Herb. Willdenow 2838; Macbride photo 17586] (F--663065--photo, Kr--photo, N--photo).

#### AEGIPHILA MOLLIS var. INTERMEDIA Moldenke

Elias describes this plant as a tree 3--5 m. tall, with a smooth trunk, dark bark marked with gray spots, branching from

near the ground, the primary branches ascending, the secondary branches spreading or nutant, and the flowers gray-green. Dugand G. says it is a shrub with rather elongate branches, opposite leaves, and small tubular white flowers, growing on shaded banks of small streams in forests. It has been collected at altitudes up to 400 m., blooming in August and fruiting in January. It has been confused with A. cordifolia (Ruíz & Pav.) Moldenke. The Elias 673, cited as A. puberulenta Moldenke in Brittonia 1: 413 (1934) and Phytologia 1: 259 (1937), is actually A. mollis var. intermedia.

Additional citations: COLOMBIA: Atlántico: Dugand G. 1137 (F--930328); Elias 1458 (F--859231). Bolívar: Elias 673 (N--photo, W--1442993, Z--photo). Magdalena: H. H. Smith 329 (Ca--584590--isotype, Cm--isotype, Vt--isotype).

#### AEGIPHILA MONSTROSA Moldenke

Williams describes this plant as a slender tree or tall shrub, up to 25 feet in height, the bark light-gray, with a pale-brown tinge, moderately smooth, less than 1/4 inch thick, the inner bark light-brown, the trunk branching from the base, 4 inches in diameter, the fruit rounded, attached to the branches. He found it at the edge of roadways in fairly dense forests, and records the common names "café cimarrón" and "talalachi". Edwards found it in a dense tropical forest; Standley and Steyermark in low or wet thickets. The fruit is described by the two latter collectors as green or light-green, appearing in March. Standley collected it at sea-level. B. P. Reko in Mitobotanica Zapoteca, pp. 97 & 127 (1945) records the common name "tala lachi", which, he says, is probably a corruption of "be-la lachi" or "be-laga lachi".

Additional citations: MEXICO: Oaxaca: L. Williams 9120 (F--897547). BRITISH HONDURAS: H. H. Bartlett 11941 (F--659095), 13011 (F--659092); Forestry Dept. 13 (F--1001403); Gentle 263 (F--863977), 404 (F--713022), 948 (F--699375, Gg--237829). GUA-TEMALA: El Petén: C. L. Lundell 1492 (F--662818). Izabal: P. C. Standley 73129 (F--990806); Steyermark 38038 (F--1034591). HON- DURAS: Atlántida: P. C. Standley 55268 (F--583996). Cortés: J. B. Edwards P.717 (F--759597, N). Yoro: Von Hagen & Von Hagen 1020 (F--943155).

#### AEGIPHILA MULTIFLORA Ruíz & Pav.

The Dombey s.n. from "Pasón Huaru-huari", cited in Phytologia 1: 251 (1937) as from an undetermined department, is actually from Madre de Dios. Metcalf describes the species as a bush 2--5 m. tall, with green calyx and lavender corollas, inhabiting dry open places in rocky soil in a region of much fog, at an altitude of 2700 m., blooming in May.

Additional citations: PERU: Huanuco: Ruíz & Favon s.n. [Hua- ssachuaas & Pallao] (F--633375--photo of isotype). Puno: R. D.

Metcalf 30550 (W--1834986); Vargas C. 1311 (F--989516). Department undetermined: Dombey s.n. [Chili et Perou] (F--998416); Ruiz 187 [Macbride photo 17587] (F--663066--photo, Kr--photo, N--photo); Ruiz & Pavon 12/70 (F--712584, F--845337).

*AEGIPHILA NERVOSA* Urb.

Additional citations: JAMAICA: Swartz s.n. (F--633326--photo of type). HISPANIOLA: Haiti: Ekman H.472 (F--642166--photo).

*AEGIPHILA NOVOFRIBURGENSIS* Moldenke

The photograph of the label of the Delessert Herbarium isotype of this species, cited below, seems to prove definitely that the number of the type collection of this species is "194" [not "134" as hitherto cited by me in *Brittonia* 1: 350 (1934) and *Phytologia* 1: 251 (1937)].

Additional citations: BRAZIL: Rio de Janeiro: P. Clausen 194 [Macbride photo 28386] (F--830244--photo of isotype, Kr--photo of isotype, N--photo of isotype).

*AEGIPHILA OBDUCTA* Vell.

References: Lewkowitsch, Chem. Tech. & Analys. Oils, ed. 6, 678, 1922; Hoshne, O Jard. Bot. S. Paul. 576--577, 1941; Sampaio & Peckolt, Arquiv. Mus. Nac. Rio de Jan. 37: 334, 1943.

An additional synonym is *Aegiphila obducata* Vell. apud Sampaio & Peckolt, Arquiv. Mus. Nac. Rio de Jan. 37: 334, in syn. 1943. The accepted specific name is also spelled with a capital initial letter in this reference.

Dusén reports the plant as growing at the edge of virgin forests; Mello Barreto describes it as a tree 3--5 m. tall. The Mello Barreto specimens are typical of the large-flowered bullate-leaved form of the species; the Handro represents the thin non-bullate-leaved form with smaller flowers. The flowers of at least the former form are described as odoriferous. Williams & Assis describe the plant as a "vine", with purple flowers, growing in forests at an altitude of 1400 m. Lewkowitsch, in the reference cited above, reports that a little-known Brazilian oil is extracted from this species. Niederstadt has determined that the yield is 21.6 percent. The oil has a specific gravity of 0.9579 at 26° C., its saponification value is 199.5, its iodine value 64.15, and its acid value 72.2. The species has been collected in anthesis in June, and in fruit in December.

Additional citations: BRAZIL: Minas Geraes: Mello Barreto 9109 (F--933081), 9111 (F--933073); Williams & Assis 7914 (G, N). Paraná: Dusén 8143 (F--668475); Jönsson 379a (Ca--533218, F--668474). Rio de Janeiro: Brade 10542 [Herb. Rio de Jan. 22947] (Ja); Herb. Rio de Jan. 31720 (Ja). Santa Catharina: Schwacke IV.184 [Herb. Rio de Jan. 32271] (Ja). São Paulo: Herb. Rio de Jan. 32268 (Ja). State undetermined: Herb. Rio de

Jan. 32267 (Ja), 32274 (Ja). CULTIVATED: Brazil: São Paulo: Handro, pl. viv. 442 [Herb. Inst. Biol. S. Paulo 33523] (F--895762).

AEGIPHILA ODONTOPHYLLA Donn. Sm.

Additional citations: COSTA RICA: Guanacaste: Orsted 11174 [Macbride photo 22775] (Kr--photo, N--photo). Heredia: Pittier 288 (F--633320--photo of type).

AEGIPHILA PANAMENSIS Moldenke

Woodson has described the corolla of this plant as lemon-yellow or "greenish-cream", Matuda as yellowish-white. It has been collected in anthesis in August, and at altitudes of 1200 to 1500 m.

Additional citations: MEXICO: Chiapas: Matuda 2115 (Mh), 16791 (N). COSTA RICA: Alajuela: Brenes 4320 [105; 9516] (N), 9557 [180; 4395] (N). PANAMA: Chiriquí: Woodson & Schery 758 (N). Coclé: Woodson, Allen, & Seibert 1247 (F--969482, N), 1249 (F--969481, N), 1756 (N). Darién: P. H. Allen 856 (F--1005206).

AEGIPHILA PANICULATA Moldenke

Steyermark describes this plant as a vine, with pale-green leaves and orange fruit; Allen says it is a tree to 3 m. tall. It has been collected in fruit in October, November, and January. The Brenes 16823 and Steyermark 30757, cited below, have very typical fruit for this species and very typical fruiting-calyxes. They need only be compared with fruiting sheets of A. panamensis for proof that the two species are quite distinct. The Allen 1123 cited below was distributed as A. falcata Donn. Sm., but has the closely investing cupuliform calyx and conspicuously punctate leaves of A. paniculata. It was collected at an altitude of only 35 m.

Additional citations: GUATEMALA: Chiquimula: Steyermark 30757 (F--1037191). COSTA RICA: Alajuela: Brenes 16823 [2] (F--858958, N). PANAMA: Panamá: P. H. Allen 1123 (F--1005205).

AEGIPHILA PARAGUARIENSIS Briq.

Rojas collected this species "hanging over cliff", and Dusén found it at an altitude of 730 m.

Additional citations: BRAZIL: Mattogrosso: H. H. Smith s.n. [Herb. Rio de Jan. 32269] (Ja). Paraná: Dusén 15963 (F--668476). São Paulo: Heiner 270 (S). PARAGUAY: Hassler 4498 [Macbride photo 24618] (F--772032--photo of cotype, Kr--photo of cotype, N--photo of cotype); Rojas 12768 (N).

AEGIPHILA PARVIFLORA Moldenke

The label on the Macbride photographs, cited below, reads "2296" in error. The plant depicted is Spruce 589.

Additional citations: BRAZIL: Pará: Spruce 589 [Macbride

photo 28387] (F--830276--photo of isotype, Kr--photo of isotype, N--photo of isotype).

**AEGIPHILA PAVONIANA** Moldenke

Haught describes this as a small tree about 5 m. tall, with fairly conspicuous inflorescences of cream-colored flowers, blooming in December at an altitude of 100 m.

Additional citations: ECUADOR: Guayas: Haught 3004 (N).

**AEGIPHILA PERNAMBUCENSIS** Moldenke

Moraes Vasconcellos has found this plant in woods and records the common names "caféiro de cabra" and "cafeliro de cabra". The species is closely related to A. australis Moldenke and not to A. crenata with which it has been confused, but which belongs in a different subgroup of the genus.

Additional citations: BRAZIL: Parahyba: Moraes Vasconcellos 841 (N), 853 (N), s.n. [Herb. Serv. Florest. Est. S. Paulo 841] (W--1564377), s.n. [Herb. Serv. Florest. Est. S. Paulo 455] (W--1564367). Pernambuco: Fickel 3042 (Du--255725--isotype, Mi--isotype).

**AEGIPHILA FERPLEXA** Moldenke

Steyermark describes this plant as a tree 20--25 feet tall, with firmly membranous leaves, rich-green above, pale dull-green beneath, calyx rich-green, corolla greenish-yellow, and style whitish, blooming in April at an altitude of 1200--1480 m.

Additional citations: VENEZUELA: Monagas: Steyermark 62260 (N).

**AEGIPHILA PERUVIANA** Turcz.

Klug has collected this species at altitudes of 1200 to 1600 meters.

Additional citations: PERU: San Martín: Klug 3511 (F--736324) Spruce 4275 [Macbride photo 24619] (F--772033--photo of isotype, N--photo of isotype).

**AEGIPHILA FLATYPHYLLA** Briq.

Additional citations: PARAGUAY: Hassler 8056 [Macbride photo 24620] (F--772028--photo of isotype, Kr--photo of isotype, N--photo of isotype).

**AEGIPHILA PUBERULENTA** Moldenke

This plant is described as a shrub 2--4 m. tall or a tree, with white or creamy-yellow corollas which soon fall off, fragrant, blooming in June and October, at altitudes of 50 to 510 m. It inhabits thickets and is abundant on limestone soil. It has been widely confused with A. mollis, A. mollis var. intermedia, and A. glandulifera. The Elias 673 cited as A. puberulenta in Brittonia 1: 413 (1934) and Phytologia 1: 259 (1937) proves to



be A. mollis var. intermedia. Common names recorded by Dugand are "bollo limpio" and "San Juan de la verdad". This distinguished botanist notes that his no. 720, cited below, is "probably the same as no. 639", but I regard the latter as A. mollis.

Additional citations: COLOMBIA: Atlántico: Dugand G. 256 [Mus. Yale School of Forestry 22545] (F--664070), 720 (F--744907); Elias 581 (N), 1102 (F--699290, N, N, N). Bolívar: Dugand & Jaramillo 3431 (W--1852289). Magdalena: Haught 2288 (N). VENEZUELA: Aragua: Ll. Williams 10222 (F--946533).

#### AEGIPHILA QUINDUENSIS (H.B.K.) Moldenke

Williams reports this to be a shrub or small tree, 1.5 m. tall, with light-gray fairly smooth bark, creamy-white corollas, and globular yellowish or vermilion fruit. The fruit is very large, 1.3--1.5 cm. in diameter, the fruiting-calyx very shallowly cupuliform, wide-spreading, about 1 cm. wide. heavy, glabrous, its rim distinctly lobed. The species has been found in bloom in May, and at altitudes of 450--960 m. It has often been confused with A. martinicensis. Steyermark describes it as a tree 20 feet tall, with membranous leaves that are dark-green above and pale-green beneath, the calyx pale yellow-green, the corolla pale-yellow, and the filaments whitish. He found it at altitudes of 1200 to 1450 m.

Additional citations: VENEZUELA: Aragua: Pittier 14993 (W--1833196), 15474 (W--1909582), 15481 (W--1909584); Ll. Williams 10251 (F--946419, F--989699, Gg--295555), 10391 (F--948392). Carabobo: Karsten s.n. (F--642170--photo). Monagas: Steyermark 62046 (N).

#### AEGIPHILA RACEMOSA Vell.

Sampaio & Peckolt in Arquiv. Mus. Nac. Rio de Jan. 37: 334 (1943) reduce this species to A. cuspidata Mart., but this is an error. Martius' species is conspecific with A. vitellini-flora. Steyermark describes the plant as a "vining shrub", 15 to 25 feet tall. Monteiro da Costa calls it a "vine", blooming in January, called "cawira", inhabiting lowlands, and used in aromatic baths for nervous diseases.

Additional citations: VENEZUELA: Mérida: Steyermark 56728 (F--1221912, N). BRITISH GUIANA: De la Cruz 4292 (Cm), 4552 (Cm); Herb. Forest Dept. Br. Guian. 3081 [F.345] (K). BRAZIL: Pará: Monteiro da Costa 240 (F--693925).

#### AEGIPHILA RIEDELIANA Schau.

Sampaio & Peckolt in Arquiv. Mus. Nac. Rio de Jan. 37: 334 (1943) reduces A. serrata Vell. to A. graveolens Mart. & Schau., but as has been pointed out by me in Brittonia 1: 311 (1934) it seems more properly to belong with A. Riedeliana.

Additional citations: BRAZIL: Bahia: J. E. Fohl 4392 [Macbride photo 34309] (Kr--photo of cotype, N--photo of cotype).

Rio Grande do Sul: Rambo 29169 (N).

*AEGIPHILA RORAIMENSIS* Moldenke

Steyermark describes this species as a shrub 5--8 feet tall, with subcoriaceous leaves that are dark-green above and dull-green beneath with gray-buff pubescence, stems buff-pubescent, and calyx gray-buff. He found it in woods bordering a savanna on a ridge above La Laja, at the base of Sororopan-tepui, alt. 1375--1460 m., blooming in November. It has been confused with the genus Citharexylum.

Additional citations: VENEZUELA: Bolivar: Steyermark 60812 (N).

*AEGIPHILA SALTICOLA* Moldenke

The supplementary characters given by me for this species in *Phytologia* 1: 397--398 (1940) applies only to the Ducke specimen there cited. It seems, on re-examination, that this specimen may actually be A. intermedia Moldenke. It is possible that A. salticola is actually conspecific with A. intermedia. Mexia records the common name "genipapo do matta".

Additional citations: BRAZIL: Maranhão: Fróes 11856 (N). Pará: Mexia 5922 (Gg--286582--isotype).

*AEGIPHILA SCANDENS* Moldenke

Ducke describes this as a woody climber with greenish-white flowers, blooming in March, growing in old secondary forests on terra firma.

Additional citations: BRAZIL: Amazonas: Ducke 1190 (N, W--1832444).

*AEGIPHILA SCHIMPFII* Moldenke

The type collection of this species, cited by me in *Phytologia* 1: 266 (1937) as from "Biscay, Ecuador", was actually collected at Bucay, Guayas, Ecuador. Svenson in *Am. Journ. Bot.* 33: 480 (1946) describes the species as a shrub 6--9 feet tall, with yellow flowers and exserted stamens, found along streams near sea-level, blooming in April.

Additional citations: ECUADOR: Guayas: Svenson 11448 (N).

*AEGIPHILA SELLOWIANA* Cham.

References: Hoehne, Kuhlmann, & Handro, *O Jard. Bot. S. Paul.* 577. 1941; *Instit. de Botan. Observ. Ger. Contrib.* 5: 19 & I. 1942; Hoehne, *Relat. Anual Inst. Bot.* 1944: 118. 1944.

It has been collected in fruit in March and April. Additional common names are "pau de tamanco", "tamanqueira", "tamanqueiro", "cinzeiro", and "papagaio". Mexia describes it as a slender tree 10 m. tall, with a pithy stem and long straggling branches and slightly fragrant greenish-white or white flowers and fruit in heavy clusters, growing in second-growth woods commonly.